



RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number: 09/486,623B
Source: 1600
Date Processed by STIC: 5/14/2003

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MAY 22 2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TECH CENTER 1600/2900

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



1600

RECEIVED

MAY 22 2003

TECH CENTER 1600/2901

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

3 <110> APPLICANT: Nielsen, Peter E.
 5 <120> TITLE OF INVENTION: Peptide Nucleic Acids Having Antibacterial Activity
 7 <130> FILE REFERENCE: ISIS-3292
 9 <140> CURRENT APPLICATION NUMBER: 09/486,623B
 10 <141> CURRENT FILING DATE: 2000-07-06
 12 <150> PRIOR APPLICATION NUMBER: 08/932,140
 13 <151> PRIOR FILING DATE: 1997-09-16
 15 <160> NUMBER OF SEQ ID NOS: 30
 17 <170> SOFTWARE: PatentIn version 3.2
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 14
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Artificial Sequence
 24 <220> FEATURE:
 25 <223> OTHER INFORMATION: Synthetic construct
 27 <400> SEQUENCE: 1
 28 tgaccatgat tacg
 31 <210> SEQ ID NO: 2
 32 <211> LENGTH: 17
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Artificial Sequence
 36 <220> FEATURE:
 37 <223> OTHER INFORMATION: Synthetic construct
 39 <400> SEQUENCE: 2
 40 tacgtgtttc ctgtgtg
 43 <210> SEQ ID NO: 3
 44 <211> LENGTH: 17
 45 <212> TYPE: DNA
 46 <213> ORGANISM: Artificial Sequence
 48 <220> FEATURE:
 49 <223> OTHER INFORMATION: Synthetic construct
 51 <400> SEQUENCE: 3
 52 gagtattcaa catttcc
 55 <210> SEQ ID NO: 4
 56 <211> LENGTH: 17
 57 <212> TYPE: DNA
 58 <213> ORGANISM: Artificial Sequence
 60 <220> FEATURE:
 61 <223> OTHER INFORMATION: Synthetic construct
 63 <400> SEQUENCE: 4
 64 attgtcttcc tttttca
 67 <210> SEQ ID NO: 5
 68 <211> LENGTH: 15

pp 3-6

Does Not Comply
Corrected Diskette Needed

14

17

17

17

RAW SEQUENCE LISTING

DATE: 05/14/2003

PATENT APPLICATION: US/09/486,623B

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

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73 <223> OTHER INFORMATION: Synthetic construct
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79 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)] glycine backbone
81 <220> FEATURE:
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83 <222> LOCATION: (15)..(15)
84 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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86 <400> SEQUENCE: 5
87 ggatcatagct gtttc 15
90 <210> SEQ ID NO: 6
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93 <213> ORGANISM: Artificial Sequence
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100 <221> NAME/KEY: misc_feature
101 <222> LOCATION: (1)..(14)
102 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
104 <220> FEATURE:
105 <221> NAME/KEY: misc_feature
106 <222> LOCATION: (15)..(15)
107 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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109 <400> SEQUENCE: 6
110 tactcatact ctcc 15
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 15
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
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123 <221> NAME/KEY: misc_feature
124 <222> LOCATION: (1)..(14)
125 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
127 <220> FEATURE:
128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (15)..(15)
130 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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132 <400> SEQUENCE: 7
133 gaatactcat actct 15
136 <210> SEQ ID NO: 8
137 <211> LENGTH: 15
138 <212> TYPE: DNA

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RAW SEQUENCE LISTING

DATE: 05/14/2003

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Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

139 <213> ORGANISM: Artificial Sequence
 141 <220> FEATURE:
 142 <223> OTHER INFORMATION: Synthetic construct
 145 <220> FEATURE:
 146 <221> NAME/KEY: misc_feature
 147 <222> LOCATION: (1)..(14)
 148 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
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 151 <221> NAME/KEY: misc_feature
 152 <222> LOCATION: (15)..(15)
 153 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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 155 <400> SEQUENCE: 8
 156 acgccacatc ttgcg 15
 159 <210> SEQ ID NO: 9
 160 <211> LENGTH: 15
 161 <212> TYPE: DNA
 162 <213> ORGANISM: Artificial Sequence
 164 <220> FEATURE:
 165 <223> OTHER INFORMATION: Synthetic construct
 168 <220> FEATURE:
 169 <221> NAME/KEY: misc_feature
 170 <222> LOCATION: (1)..(1)
 171 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 173 <220> FEATURE:
 174 <221> NAME/KEY: misc_feature
 175 <222> LOCATION: (2)..(4) FYI: "n" can only represent a single nucleotide
 176 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 177 glycine backbone
 179 <220> FEATURE:
 180 <221> NAME/KEY: misc_feature
 181 <222> LOCATION: (5)..(6)
 182 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 184 <220> FEATURE:
 185 <221> NAME/KEY: misc_feature "n" can only represent a single nucleotide
 186 <222> LOCATION: (7)..(7)
 187 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 188 glycine backbone
 190 <220> FEATURE:
 191 <221> NAME/KEY: misc_feature "n" can only represent a single nucleotide
 192 <222> LOCATION: (8)..(8)
 193 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
 194 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
 195 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)
 197 <220> FEATURE:
 198 <221> NAME/KEY: misc_feature
 199 <222> LOCATION: (9)..(14)
 200 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 202 <220> FEATURE:
 203 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING

DATE: 05/14/2003

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Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

204 <222> LOCATION: (15)..(15)
 205 <223> OTHER INFORMATION: Modified Site. N-[acetyl (2-aminoethyl)] -C-lysine-glycine
 206 backbone
 208 <400> SEQUENCE: 9
W--> 209 tnnnttnnct tccct 15
 212 <210> SEQ ID NO: 10
 213 <211> LENGTH: 15
 214 <212> TYPE: DNA
 215 <213> ORGANISM: Artificial Sequence
 217 <220> FEATURE:
 218 <223> OTHER INFORMATION: Synthetic construct
 221 <220> FEATURE:
 222 <221> NAME/KEY: misc_feature
 223 <222> LOCATION: (1)..(1) *n can only represent a single nucleotide*
 224 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 225 glycine backbone
 227 <220> FEATURE:
 228 <221> NAME/KEY: misc_feature
 229 <222> LOCATION: (2)..(4)
 230 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 232 <220> FEATURE:
 233 <221> NAME/KEY: misc_feature
 234 <222> LOCATION: (5)..(6) *n can only represent a single nucleotide*
 235 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 236 glycine backbone
 238 <220> FEATURE:
 239 <221> NAME/KEY: misc_feature
 240 <222> LOCATION: (7)..(7)
 241 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 243 <220> FEATURE:
 244 <221> NAME/KEY: misc_feature
 245 <222> LOCATION: (8)..(8) *n can only represent a single nucleotide*
 246 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
 247 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
 248 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)
 250 <220> FEATURE:
 251 <221> NAME/KEY: misc_feature
 252 <222> LOCATION: (9)..(14)
 253 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 255 <400> SEQUENCE: 10
W--> 256 nttnntntc ctttc 15
 259 <210> SEQ ID NO: 11
 260 <211> LENGTH: 15
 261 <212> TYPE: DNA
 262 <213> ORGANISM: Artificial Sequence
 264 <220> FEATURE:
 265 <223> OTHER INFORMATION: Synthetic construct
 268 <220> FEATURE:
 269 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

270 <222> LOCATION: (1)..(14)
 271 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 273 <220> FEATURE:
 274 <221> NAME/KEY: misc_feature
 275 <222> LOCATION: (15)..(15)
 276 <223> OTHER INFORMATION: Modified Site. N-[acetyl (2-aminoethyl)]-C-lysine-glycine
 277 backbone
 279 <400> SEQUENCE: 11
 280 cataactcttt ctcct 15
 283 <210> SEQ ID NO: 12
 284 <211> LENGTH: 25
 285 <212> TYPE: DNA
 286 <213> ORGANISM: Artificial Sequence
 288 <220> FEATURE:
 289 <223> OTHER INFORMATION: Synthetic construct
 292 <220> FEATURE:
 293 <221> NAME/KEY: misc_feature Site
 294 <222> LOCATION: (1)..(2)
 295 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 297 <220> FEATURE:
 298 <221> NAME/KEY: misc_feature
 299 <222> LOCATION: (3)..(3) n can only represent a single nucleotide
 300 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 301 glycine backbone
 303 <220> FEATURE:
 304 <221> NAME/KEY: misc_feature
 305 <222> LOCATION: (4)..(4)
 306 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone,
 308 <220> FEATURE:
 309 <221> NAME/KEY: misc_feature n can only represent a single nucleotide
 310 <222> LOCATION: (5)..(7)
 311 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 glycine
 312 backbone
 314 <220> FEATURE:
 315 <221> NAME/KEY: misc_feature
 316 <222> LOCATION: (8)..(10)
 317 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
 319 <220> FEATURE:
 320 <221> NAME/KEY: misc_feature n can only represent a single nucleotide
 321 <222> LOCATION: (11)..(11)
 322 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
 323 glycine backbone
 325 <220> FEATURE:
 326 <221> NAME/KEY: misc_feature
 327 <222> LOCATION: (12)..(12)
 328 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
 329 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
 330 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)
 332 <220> FEATURE:

This applies to subsequent sequences

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/14/2003
PATENT APPLICATION: US/09/486,623B TIME: 11:10:44

Input Set : A:\ISIS3292.ST25.txt
Output Set: N:\CRF4\05142003\I486623B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 2,3,4,7,8
Seq#:10; N Pos. 1,5,6,8
Seq#:12; N Pos. 3,5,6,7,11,13
Seq#:13; N Pos. 1,3,5,6,8
Seq#:19; N Pos. 8
Seq#:20; N Pos. 2,4,8

VERIFICATION SUMMARY

DATE: 05/14/2003

PATENT APPLICATION: . US/09/486,623B

TIME: 11:10:44

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0